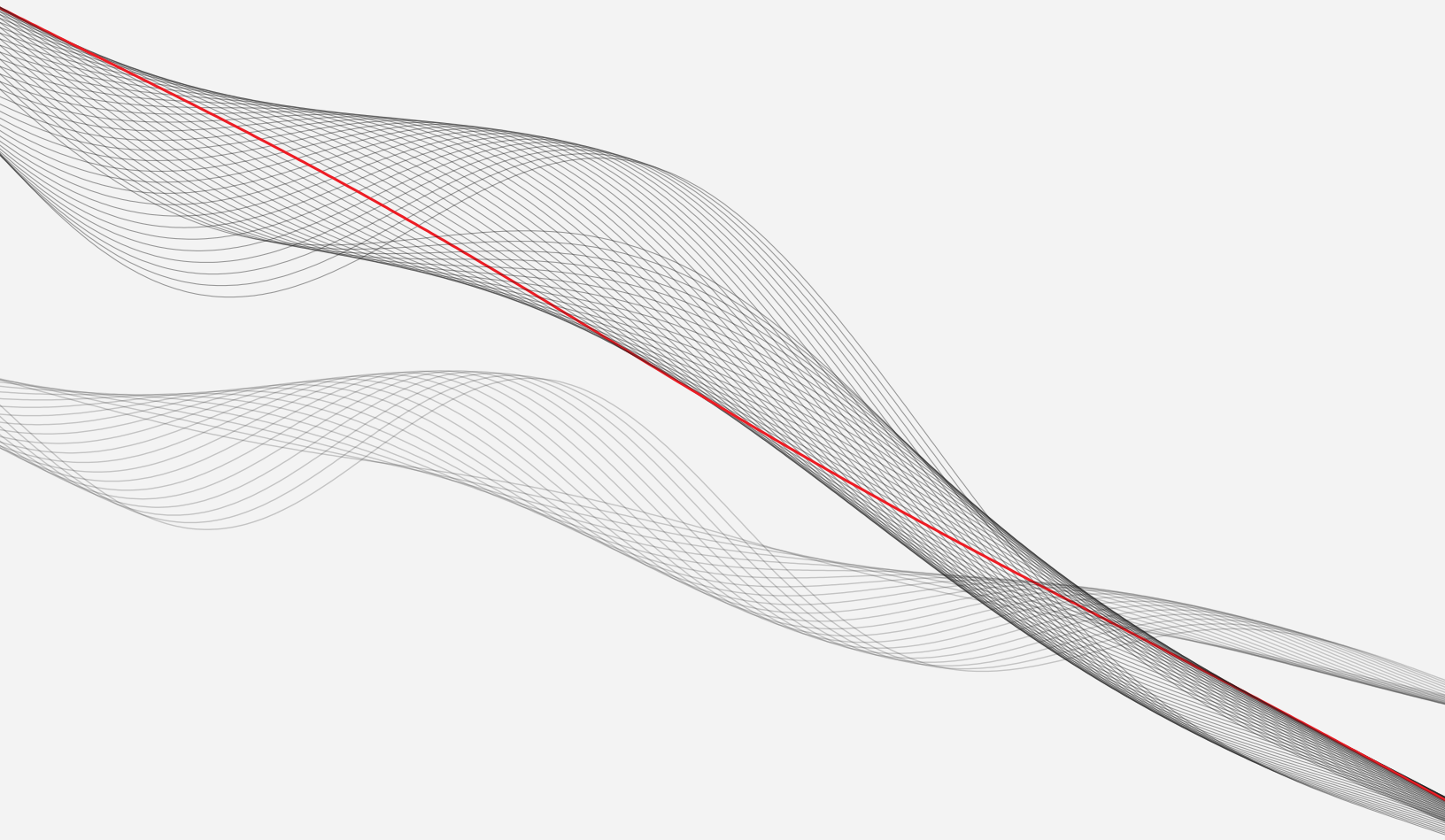


3 | Funding

Many early-stage quantum firms rely heavily on financial investment to advance their technology. Given that the field is technically complex and commercially nascent, private firms often source funds from specialized investors willing to take a patient approach.

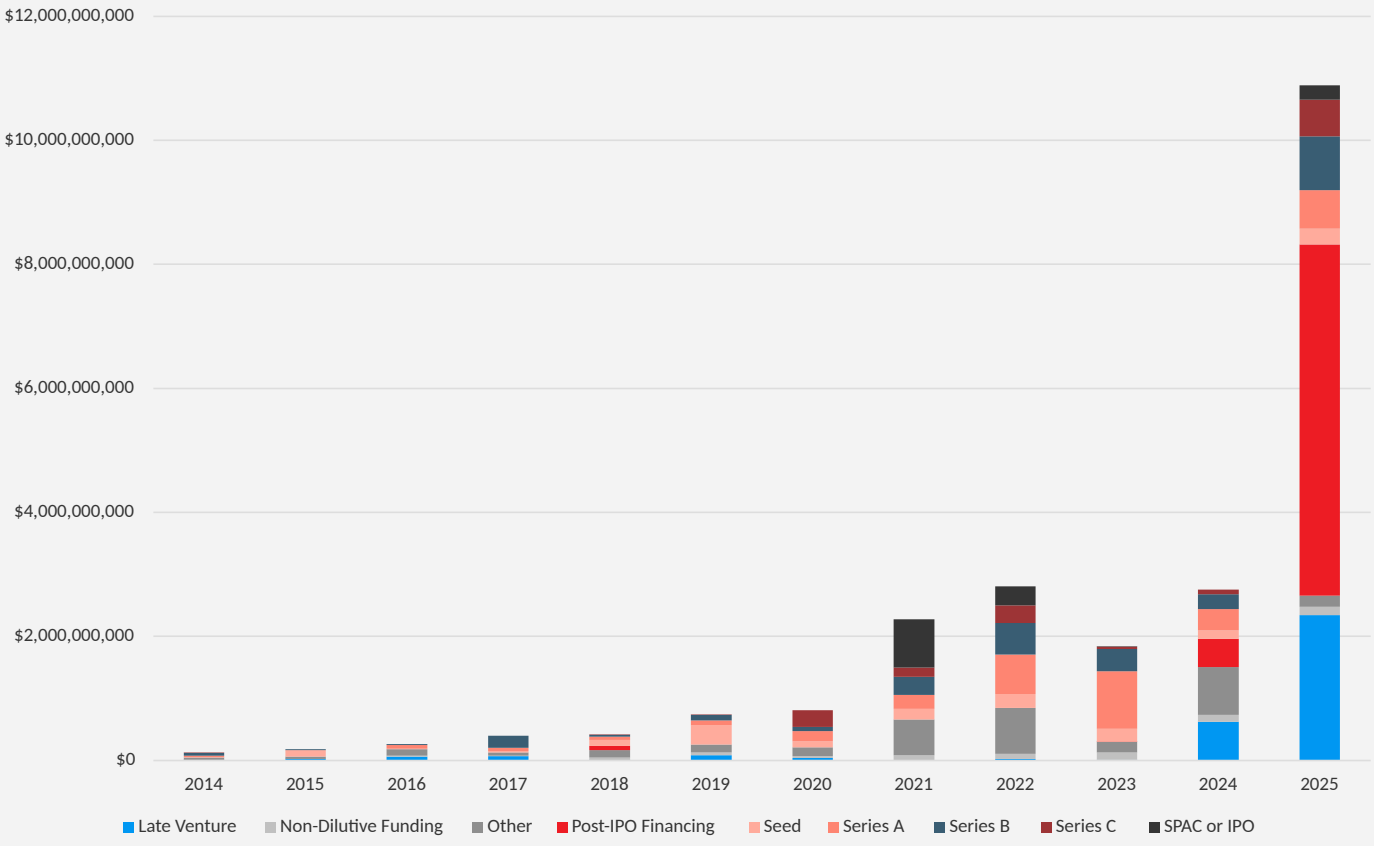
> Quantum investment hits a record $10.9 billion in 2025, nearly quadrupling in a single year as the sector enters a new growth phase.

Our data, sourced from The Quantum Insider, draws mainly from public sources and press releases. However, gathering and classifying this information comes with limitations, as not all companies disclose funding details.

3.1 | Quantum technology funding landscape by financing stage

Fig. 3.a | Quantum technology funding landscape by financing stage, 2014–2025

MIT Quantum Index Report



The data traces three distinct eras: a build-up phase (2014–2018) of steady but modest growth; a breakout phase (2019–2022) supercharged by SPAC listings; and a step-change phase (2023–2025), opening with the decade's only real correction before capital investment came back strongly. If 2021–2022 was quantum computing's public-market debut, 2024–2025 looks like its growth-equity coming-of-age.

The quantum technology funding landscape between 2014 and 2025 shows compounding momentum interrupted by a single sharp correction, followed by the most dramatic funding year on record.

Across all round types, the sector raised approximately $23.48 billion, with more than 46% of that total ($10.9 billion) landing in 2025 alone, a signal that quantum is becoming an increasingly attractive investment proposition.

$10.9B

2025 marked an unprecedented capital surge, with total funding hitting $10.9 billion, nearly four times 2024 levels, driven almost entirely by Post-IPO Financing ($5.7B) and Late Venture rounds ($2.3B), signaling that capital is now concentrating in relatively mature quantum players rather than new entrants.

The early years (2014–2017) show steady, compounding growth: funding roughly tripled from $126 million to $397 million as the technology moved from experimental to promising. 2018 stands out as a plateau year, with growth nearly flatlining (+4%) after several years of 40–50% expansion, before the sector reaccelerated sharply in 2019 (+78%).

The first real inflection came in 2021, when funding nearly tripled to $2.28 billion, a surge closely tied to the Special Purpose Acquisition Companies (SPAC) wave, which alone contributed $781 million that year as several quantum computing companies took the public-markets route rather than traditional late-stage venture rounds. Significant SPAC examples in this period included IonQ and Rigetti in 2021 and D-Wave in 2022.

2022 pushed totals to a then-record $2.81 billion, but this proved to be a local peak: 2023 delivered the decade's only real contraction, with funding falling 35% to $1.83 billion as the SPAC financing vehicle all but disappeared (dropping to just $500,000) and growth-stage capital broadly tightened.

What followed was a two-year rebound of historic scale. 2024 recovered 50% to $2.75 billion, and 2025 rose sharply to $10.9 billion, nearly four times the prior year and by far the largest single-year total.

Post-IPO Financing is the single largest category over the full period, despite appearing in only four of twelve years (2018, 2023, 2024, 2025), almost entirely on the back of a single staggering year: $5.67 billion in 2025, or 92% of the category's entire decade-long total. This is the clearest contributor to the 2025 surge: capital increasingly flowing to already-public quantum companies rather than early-stage bets.

Late Venture funding tells a similar story of concentration at the end of the timeline. After hovering in the $3–80 million range for most of the decade, it jumped to $618.5 million in 2024 and then to $2.34 billion in 2025, together accounting for over 90% of all late-venture capital ever raised. This, paired with the Post-IPO spike, suggests 2025 was defined less by new entrants and more by existing leaders raising unprecedented growth-stage capital.

Earlier-stage rounds show a steadier growth curve. Series A funding grew from $22.7 million in 2014 to a peak of $927.6 million in 2023; notably, Series A funding held up even as total market funding contracted that year, suggesting investor conviction in new-generation quantum startups persisted even as later-stage and SPAC capital retreated. Series B followed a similar late-decade acceleration, closing 2025 at $866.4 million, its highest year on record.

Seed funding has been comparatively volatile but structurally smaller, peaking early at $314.4 million in 2019, dipping to $95.9 million in 2020, and settling in the $138–254 million range through 2023–2025, a sign that seed-stage risk appetite has normalized below its 2019 highs even as the rest of the market ballooned.

Non-dilutive funding is the one category with an almost uninterrupted growth line, from $3.3 million in 2014 to $138.2 million in 2025, likely reflecting sustained support for quantum research from government grants and institutional contracts.

The SPAC/IPO channel, meanwhile, is a decisively 2021–2022 phenomenon: $781 million and $310.3 million respectively, just $500,000 in 2023, zero in 2024, and a modest $231.2 million reappearance in 2025. This confirms that the SPAC wave was an important liquidity event tied to a specific market window, and later-stage capital needs have since been met through late venture rounds and post-IPO financing instead.

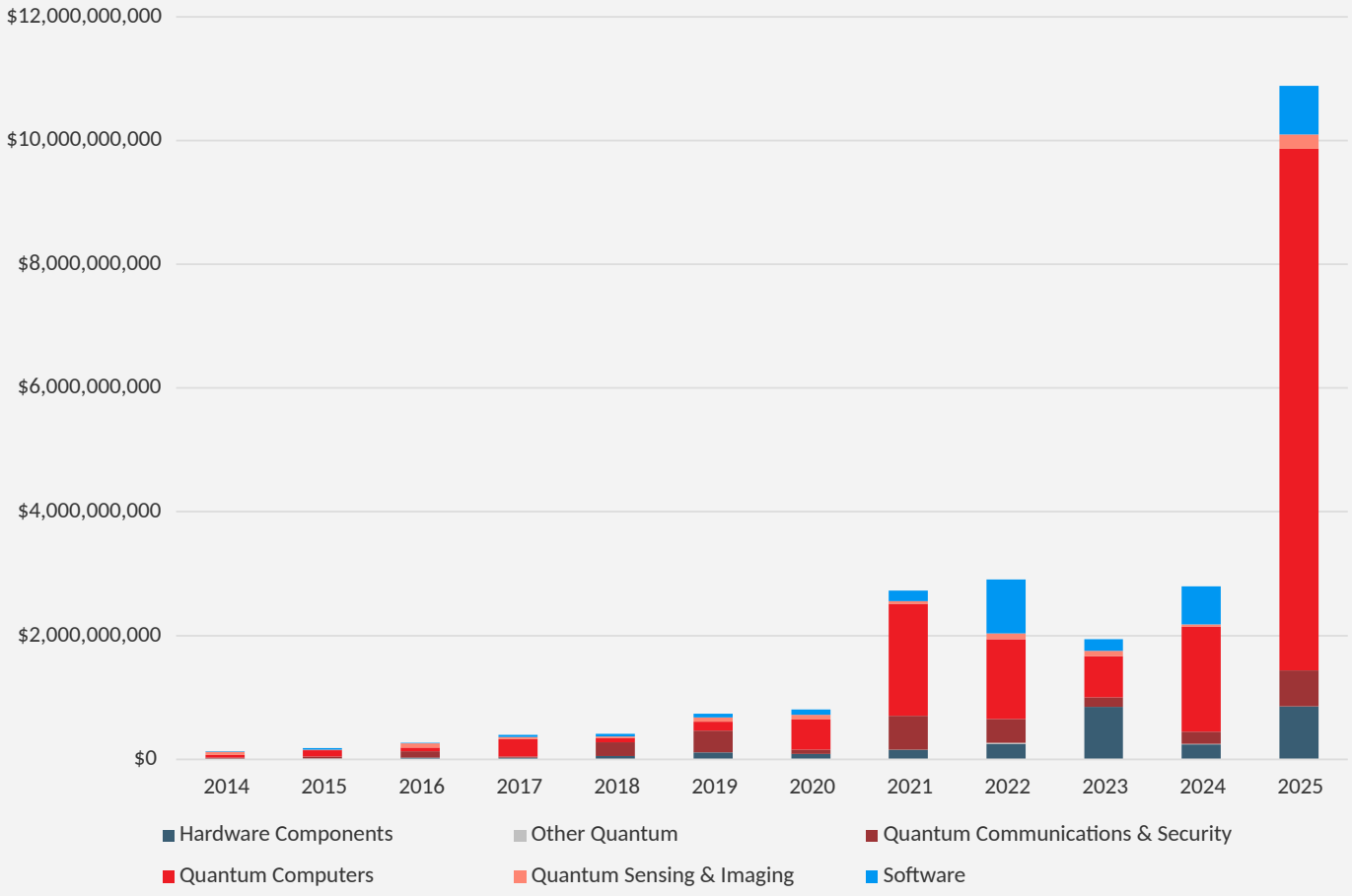
Examples of investment growth in the 2024–2025 period include NVIDIA's venture arm investing[1] in QuEra ($230 million Series B), Quantinuum (Quantinuum's $600 million Series B), and PsiQuantum in 2025 (PsiQuantum's $1 billion Series E), IQM raising $300 million in Series B in 2025[2], and Quantum Machines raising $170 million in Series C funding in February 2025[3]. The large-scale financing also continued into 2026 with examples such as UK-based Oxford Quantum Circuits (OQC) raising US$350 million in Series C in June 2026[4].

Another important development in 2026 has been the emergence of public-market exit and growth-capital pathways for previously venture-backed quantum companies. IQM announced a public-market transaction in February 2026 and began trading on Nasdaq in July 2026, as the first European quantum computing company to be listed on a major U.S. stock exchange.[5] Quantinuum's shares rose 13.3% in their Nasdaq debut in 2026, with a valuation of $17.63 billion.[6] D-Wave announced it would move the listing of its common stock from the New York Stock Exchange to Nasdaq as of July 2026.[7] These developments were also preceded in 2026 by the Nasdaq listings of Xanadu as the first pure-play photonic quantum computing company to go public[8] and Horizon Quantum listing on Nasdaq following a SPAC merger.[9]

3.2 | Quantum technology funding by category

Fig. 3.b | Quantum technology funding landscape by category, 2014–2025

MIT Quantum Index Report



The quantum technology sector has experienced significant shifts in investment patterns over the past decade, and the category-level data makes clear where that capital has concentrated. Quantum Computers have generated the highest share of overall funding by a wide margin, pulling in $15.08 billion since 2014.

No other segment comes close: Quantum Communications & Security ($2.68B), Hardware Components ($2.67B), and Software ($2.90B) each represent roughly 11–12% of total funding, while Quantum Sensing & Imaging trails at $832 million (3.4%), and the miscellaneous “Other Quantum” bucket accounts for just $25.8 million.

$15.1B

Quantum Computers have generated the highest share of overall funding by a wide margin, pulling in $15.1 billion since 2014, roughly 62% of all quantum investment across every category combined.

The data shows strong, sustained growth through 2024, particularly among Quantum Computers, which received $1.70 billion in investments across the year, more than 2.5 times their 2023 total ($670.5M) and enough on its own to drive the sector’s overall 44% year-over-year rebound. Software also showed remarkable strength in 2024, reaching $616.0 million, more than three times its 2023 level, while Hardware Components ($244.5M) and Sensing & Imaging ($34.7M) lagged behind, suggesting the 2024 recovery was led by both code-layer investment and Quantum Computers.

If 2024 was a recovery, 2025 was a structural break. Total funding across all categories hit $10.9 billion, and Quantum Computers alone accounted for $8.43 billion of it, nearly 77% of the year’s total and more than five times the category’s already-strong 2024 figure. This single category effectively defines the 2025 surge: strip it out, and the rest of the sector grew from roughly $1.1 billion in 2024 to $2.45 billion in 2025, still a healthy more-than-doubling, but nowhere near the scale of the compute-side sharp increase.

Communications & Security ($578.0M) and Hardware Components ($857.0M) posted their strongest years on record in 2025, while Sensing & Imaging ($229.8M) rebounded sharply from subdued 2024 levels, indicating that, even as Quantum Computers captured the largest share of capital, the broader ecosystem of adjacent technologies grew in tandem rather than being crowded out.

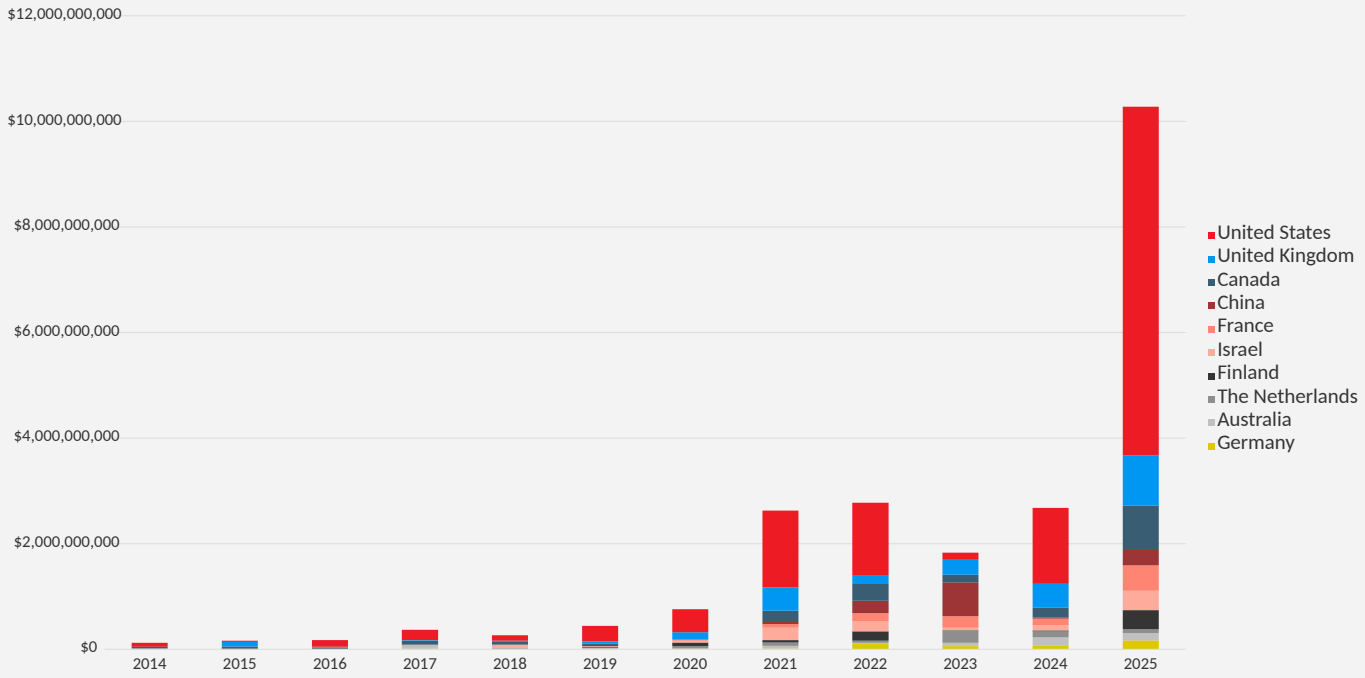
Quantum Computers have led every major growth cycle. Its funding jumped from $480M in 2020 to $1.8B in 2021, the single largest driver of that year's 238% overall surge, before dipping through 2022–2023 and then re-accelerating into the record-breaking 2024–2025 run. 2023 was the only broad-based correction of the decade, with total funding falling 33% as nearly every category retreated simultaneously (Quantum Computers -48%, Software -78%, Communications -61%), before all categories recovered together in 2024.

Software's rise has tracked, and increasingly rivaled Hardware. From near-negligible funding in 2016 ($224K), Software has grown into a $2.9 billion cumulative category, overtaking Hardware Components' decade-long total ($2.7B), a sign that investor confidence has broadened from physical qubit infrastructure toward the algorithms and tooling layer built on top of it.

3.3 | Quantum technology funding landscape by country

Fig. 3.c | Quantum technology funding landscape by top 10 countries, 2014–2025

MIT Quantum Index Report



The United States ranks at the top by a wide margin in total equity funding across 2014–2025. U.S.-headquartered firms secured $12.23 billion, more than four times the second-placed nation (the UK, with $2.60 billion). Canada ranks third with $1.97 billion, rounding out a top tier that captures nearly 75% of all quantum investment across the top 10 countries.

At the next level down, China ($1.26B), France ($1.10B) and Israel ($1.03B) form a closely bunched middle tier, each having crossed the billion-dollar mark cumulatively despite starting from near-zero funding as recently as 2017–2018.

Finland ($692.6M), the Netherlands ($619.7M), Australia ($539.2M) and Germany ($443.1M) cluster just behind, having built their totals through steadier, less spike-driven growth.

The funding history over time shows that most countries maintained very modest, relatively volatile investment levels through 2016, after which the market entered a more consequential growth phase. 2017 marked the first meaningful acceleration, more than doubling the prior year's total on the strength of early Australian and U.S. activity, though this proved uneven: 2018 saw a 28% pullback, largely reflecting the absence of large U.S. rounds that year.

From 2019 onward, growth became more broad-based: nearly every country in the top 10 began contributing meaningfully, and by 2021 the market had entered its first major boom, with total funding nearly quadrupling to $2.63 billion. This was driven disproportionately by the U.S. ($1.46B) and a sudden emergence of Israeli funding ($235.5M, up from $2.5M in 2019), alongside the UK's breakout year ($437.4M). 2022 essentially held these gains (+6%), with China making its first major appearance ($233.8M) and Canada surging to $330.9M.

2023 stands out as the only true correction in the country-level data, with total funding falling 34% to $1.83 billion, driven almost entirely by a sharp U.S. pullback (from $1.37B to just $117.0M), even as several other countries posted their strongest years yet: China ($638.4M), France ($217.5M), and the Netherlands ($236.1M) all hit multi-year highs, suggesting capital was rotating toward Europe and Asia even as the U.S. market paused.

2024 brought a broad-based recovery (+47%), led by a rebound in U.S. funding to $1.44 billion, alongside record years for Australia ($160.5M) and steady gains across the UK, Canada and the Netherlands.

- 2025 marked a global surge: the U.S. ($6.61B), the UK ($946M), Canada ($826M), France ($480M), Israel ($367M), and Finland ($362M) all posted record-high years simultaneously, showing the funding boom broadened across geographies even as American capital scaled fastest.

64%

- In 2025, top-10 country funding reached $10.28 billion, of which the U.S. contributed $6.61 billion, more than quadrupling its 2024 levels, and ended up accounting for 64% of the top-10 total.

3.4 | Quantum & AI data center colocation

- The positioning of quantum systems alongside AI hardware in data centers suggests that quantum firms are beginning to access a new commercial market, with cloud providers and large enterprises becoming potential buyers of quantum hardware and services.

Across 2025–2026, quantum computing has started to take on a new role in AI data centers as an additional form of specialized processing. The physical colocation of quantum processing units (QPUs) inside commercial data center environments has accelerated in this time frame.

In August 2026, it was announced that Quantinuum's Helios quantum computer will be deployed inside a U.S.-based Oracle Cloud Infrastructure (OCI) AI data center, where it will operate alongside OCI's existing GPU and high-performance computing infrastructure. The stated objective was to make hybrid quantum-AI workloads available as an OCI service, allowing classical and quantum processors to contribute to different stages of the same computational problem. Quantinuum subsequently described the deployment as an "industry-first," making it an important example of quantum hardware becoming part of the physical and computational architecture of an AI-focused data center.[10]

Other deployments suggest that this development is becoming a broader infrastructure trend. In June 2026, Oxford Quantum Circuits (OQC), JPMorganChase and AMD announced a dedicated Quantum-AI Data Centre in London that combines OQC quantum hardware with AI and high-performance classical computing resources supplied in part by AMD. JPMorganChase researchers are using the environment to investigate hybrid quantum-classical algorithms, portfolio optimization, quantum machine learning, and AI models designed to improve quantum-circuit performance.[11]

A different model can be seen at Aramco, where Pasqal has installed a 200-qubit neutral-atom quantum processor directly in the company's data center in Dhahran. The system entered active operation through a commercial Quantum Computing as a Service platform in May 2026 and is being explored for optimization, simulation, energy and industrial applications. [12]

The interest in using quantum hardware in data centers is not entirely novel in itself, as in 2023 Quandela announced the delivery of its MosaiQ photonic quantum computer to an OVHcloud data center, providing an earlier, smaller-scale example of a cloud and data-center operator installing quantum hardware within its own facilities.[13][14]

The increased frequency of these collaborations points toward the emergence of a hybrid computing architecture in AI data centers. In such a system, CPUs, GPUs, HPC systems, and quantum processing units perform complementary tasks, with workloads moving between them according to the type of computation required. This approach is also being supported by dedicated interconnection technologies.

NVIDIA's NVQLink architecture, for example, is designed to connect quantum processors directly with GPU-accelerated supercomputing systems through low-latency, high-throughput links, allowing GPUs to support functions such as quantum control, calibration, and error correction while also enabling hybrid quantum-classical applications.[15]

HPE and Quantinuum have similarly begun developing frameworks for integrating quantum computers with existing HPC and AI environments.[16] These developments reinforce the idea that the QPU may eventually become another specialized accelerator within the data center, comparable not in function but in architectural role, similar to how GPUs are used alongside CPUs today.

This convergence could become even more significant for AI data-center design, as facilities that host quantum processors would need to support specialized control systems and communication links required to reliably connect quantum and classical hardware. For instance, BTQ Technologies and data-center developer TIDAL PWR announced in July 2026 that they are developing reference architectures for facilities intended to support AI, HPC, and future quantum workloads, including requirements for networking, security, procurement, and trusted supply chains.[17]

3.5 | Future research

With relatively few quantum venture deals occurring globally each year, reporting gaps naturally exist, offering a great opportunity for collective data improvement. If you possess data that could strengthen future Quantum Index Reports, we welcome your input.

Looking ahead, our analysis points to several high-priority research areas. Key topics include comparative cross-country studies on how research investment and talent pipelines fuel startup growth, impact assessments correlating funding with technical milestones, and a deeper look at the strategic role of corporate investors.

A related and currently underexplored area is the question of realized returns.

As the earliest quantum investments begin to mature, tracking exits, valuations and follow-on financing will be pivotal in understanding what financial performance from quantum investment actually looks like.

You can reach us at contact@qir.mit.edu

Footnotes

[1] Matt Swayne, 'How Is NVIDIA "Betting" on Quantum? A Look at NVentures Quantum Investment Playbook From Skepticism to Strategic Stakes' (*The Quantum Insider*, 13 September 2025) <https://thequantuminsider.com/2025/09/13/how-is-nvidia-betting-on-quantum-a-look-at-nventures-quantum-investment-playbook-from-skepticism-to-strategic-stakes/> accessed 6 July 2026.

[2] 'IQM Quantum Computers Raises over $300 million in Series B Funding Round' (*HPCwire*) <https://www.hpcwire.com/off-the-wire/iqm-quantum-computers-raises-over-300m-in-series-b-funding-round/> accessed 20 June 2026.

[3] 'Quantum Machines Raises $170 Million in Series C Funding' (*Quantum Machines*) <https://www.quantum-machines.co/press-release/quantum-machines-raises-170-million-in-series-c-funding/> accessed 16 July 2026.

[4] 'OQC Raises £260m in Europe's Largest Ever Private Quantum Computing Funding Round – OQC' (17 June 2026) <https://oqc.tech/company/newsroom/series-c> accessed 16 July 2026.

[5] 'IQM Joins Nasdaq as Public Quantum Computing Company' (*The Quantum Insider*, 3 July 2026) <https://thequantuminsider.com/2026/07/03/iqm-begins-trading-on-nasdaq/> accessed 29 July 2026.

[6] 'Honeywell's Quantinuum Valued at $17.6 Billion as Shares Rise in Nasdaq Debut' *Reuters* (4 June 2026) <https://www.reuters.com/business/honeywells-quantinuum-heads-nasdaq-debut-quantum-computing-gains-momentum-2026-06-04/> accessed 16 August 2026.

[7] Matt Swayne, 'D-Wave Announces Transfer of Stock Exchange Listing to Nasdaq' (*The Quantum Insider*, 15 July 2026) <https://thequantuminsider.com/2026/07/15/d-wave-announces-transfer-of-stock-exchange-listing-to-nasdaq/> accessed 6 August 2026.

[8] 'Xanadu | Xanadu Becomes First Pure-Play Photonic Quantum Computing Company to Go Public' <https://www.xanadu.ai/press/xanadu-becomes-first-pure-play-photonic-quantum-computing-company-to-go-public> accessed 11 June 2026.

[9] Matt Swayne, 'Horizon Quantum Goes Public via SPAC, Raises $120 Million' (*The Quantum Insider*, 19 March 2026) <https://thequantuminsider.com/2026/03/19/horizon-quantum-goes-public-via-spac-raises-120-million/> accessed 6 August 2026.

[10] Quantinuum's most advanced quantum computer and others, 'Quantinuum and Oracle Partner to Accelerate Hybrid Quantum Compute Adoption on Oracle Cloud Infrastructure' <https://www.oracle.com/news/announcement/quantinuum-and-oracle-partner-to-accelerate-hybrid-quantum-compute-adoption-on-oracle-cloud-infrastructure-2026-08-11/> accessed 20 August 2026.

[11] 'OQC, JPMorganChase and AMD Commence Research Collaboration to Develop New Quantum-AI Platform in London' <https://www.jpmorganchase.com/about/technology/blog/oqc-jpmc-amd-quantum-ai-platform> accessed 19 August 2026.

[12] 'Aramco and Pasqal Launch Commercial Quantum Computing as a Service Platform' (18 May 2026) <https://www.aramco.com/en/news-media/news/2026/aramco-and-pasqal-launch-commercial-quantum-computing-as-a-service-platform> accessed 20 August 2026.

[13] 'First Quandela Quantum Computer Delivered and Installed in OVHcloud Datacenter' (*Quandela*) <https://www.quandela.com/about-us/newsroom/first-quandela-quantum-computer-delivered-and-installed-in-ovhcloud-datacenter/> accessed 20 August 2026.

[14] 'OVHcloud Purchases Its First Quandela Quantum Computer to Spur Innovation in the Quantum Ecosystem' (16 March 2023) <https://corporate.ovhcloud.com/en/newsroom/news/ovhcloud-quantum-quandela-mosaiq/> accessed 21 August 2026.

[15] 'NVIDIA Introduces NVQLink — Connecting Quantum and GPU Computing for 17 Quantum Builders and Nine Scientific Labs' (*NVIDIA Newsroom*) <https://nvidianews.nvidia.com/news/nvidia-nvqlink-quantum-gpu-computing> accessed 21 August 2026.

[16] 'HPE Advances Quantum Computing at Scale with Expanded Industry Collaborations | HPE' <https://www.hpe.com/us/en/newsroom/press-release/2026/06/hpe-advances-quantum-computing-at-scale-with-expanded-industry-collaborations.html> accessed 20 August 2026.

[17] BTQ Technologies Corp, 'BTQ Technologies Announces Strategic Collaboration with TIDAL PWR to Advance Trusted Quantum Data Center Architecture' <https://www.newswire.ca/news-releases/btq-technologies-announces-strategic-collaboration-with-tidal-pwr-to-advance-trusted-quantum-data-center-architecture-870426888.html> accessed 21 August 2026.

